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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/553,444	07/31/2006	Bo Serwin	742111-168	1445

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ROBERTS MLOTKOWSKI SAFRAN & COLE, P.C.
Intellectual Property Department
P.O. Box 10064
MCLEAN, VA 22102-8064

EXAMINER

AHMED, SHEEBA

ART UNIT	PAPER NUMBER
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1794

NOTIFICATION DATE	DELIVERY MODE
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09/30/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/553,444	Applicant(s) SERWIN ET AL.	
	Examiner SHEEBA AHMED	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 June 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) 14-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>7/31/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Restriction

1. Applicant's election with traverse of Group I, claims 1-13 in the reply filed on June 23, 2009 is acknowledged. The traversal is on the grounds that only Y and A category documents are mentioned in the International Search Report and that in the written opinion prepared by the International Search Authority, the claims, and thereby the invention, is novel, such that a contribution beyond that of the prior art exists.

However, the Examiner disagrees. Documents DE 24 05155 and WO 97/33054A discovered in the international search clearly shows that there is a lack of inventive step in the claims, so there is no technical relationship left over the prior art among the claimed inventions involving one or more of the same or corresponding special technical features.

Hence, the restriction requirement is maintained and made FINAL.

Claims 1-19 are pending of which **claims 1-13 are now under consideration.**

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Independent claim 1 recites a composite sandwich **plate-like** construction, comprising a tension plate, a contact layer and a compression layer, said compression layer being an inorganic layer at least comprising **ultra fine** particles and a binder.

The phrase "plate-like" renders the claim indefinite because the claim includes elements not actually disclosed (those encompassed by "-like"), thereby rendering the scope of the claim unascertainable. See MPEP § 2173.05(d). Furthermore, the term "ultra fine" is a relative term which renders the claim indefinite. The term "ultra fine" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Claims 3-7 and 9-12 recite the amount of the reinforcement in the organic layer, the amount of the fiber in the inorganic layer, and the size of the aggregate used in the inorganic layer however in each instance the recited ranges are followed by another "preferred range". However, the phrase "preferably" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claim 8 is dependent on claim 1 and recites that "the water/binder ratio is between 0.15 and 0.45 more preferred between 0.20 and 0.40 and most preferred between 0.25 and 0.35". However, there is no antecedent basis for "the water/binder ratio" in either claim 8 or claim 1.

Appropriate correction or clarification is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 2, and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Kahn (US 3,774,359 A).

Kahn discloses a unitized framework of steel beams with reinforcing rods and stiffening brackets welded throughout, and made completely rigid by casting concrete within the framework and bonding the concrete to the framework. The steel and concrete plate is constructed by arranging steel members into a framework, the size and shape of the desired plate, and welding adjacent mitered ends of the members together. Added framework rigidity is provided by welding stiffening steel members at each corner. A plurality of reinforcing rods, spaced apart, extend from one side of the framework to the other. The rigid plate construction is finalized by casting concrete into the steel framework which is previously prepared with a bonding agent. The resulting unitary steel and concrete plate requires less concrete and less steel than normal panels when subjected to equal loads. The disclosed steel and concrete panel is applicable for use as walls, ceilings, and/or floors. Prior to pouring of the concrete into framework, the entire interior steel framework is thoroughly cleaned to remove all scale, rust, etc. Various methods may be employed to clean the steel framework, such as sand blasting, wire brushing, or pickling. After the steel framework is clean and dry,

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a commercial bonding agent, which will create a bond between concrete and steel, is brushed, rolled, or sprayed onto the inside legs of the steel members, along with on the spacer bars. After the required time has elapsed with epoxy applied to become tacky, concrete is cast within the confines of the framework. The use of epoxy on the steel framework 21 prior to casting of concrete 36, provides assurance that steel and concrete will bond together. By placing a bonding agent onto cleaned steel members prior to casting of the concrete, concrete shrinkage is substantially eliminated and thereby gaps between the concrete and the steel are prevented. The resulting effect is the creation of a unitary steel and concrete panel which possesses the structural characteristics of a concrete plate (See Abstract, Column 1, lines 26-28; Column 1, lines 37-53; Column 4, lines 61-67; and Column 5, lines 1-22).

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to SHEEBA AHMED whose telephone number is (571)272-1504. The examiner can normally be reached on Monday-Friday from 8am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Callie Shosho can be reached on (571)272-1123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sheeba Ahmed/
Primary Examiner, Art Unit 1794